

"Saturn" (1971)**Complex "Saturn"**

Tactical missile system. R&D was conducted in 1969-1971, probably by the Moscow Institute of Thermal Engineering. Work was curtailed due to the low accuracy of the range corrector and, accordingly, the low accuracy of the missile itself.

**Guidance** was carried out by a launcher, a range corrector similar to that used on the [Luna-3](#) rocket was installed on the rocket. The rocket was stabilized by rotation at a relatively high speed (for rockets of this weight).

Author: [DIMMI](#)

Created: 06.04.2009 22:39:34

Comments: 1

[READ THE FULL ARTICLE →](#)Complex Kornet-D / Kornet-EM**DATA AS OF 2011 (standard replenishment)****Kornet-D / Kornet-EM Complex****9M133FM-3 / 9M133FM / 9M133M-2 Missiles**

★★★★

Antitank missile system / multipurpose missile system. Developed by the Instrument-making Design Bureau (hereinafter referred to as KBP, Tula), chief designer of the direction is Lev Zakharov. The complex was tested in 2011. On the official KBP website, the complex is called "Kornet-EM", in the media - "Kornet-D". According to unconfirmed official information, the name for the complex in the Russian Armed Forces is "Kornet-D", the export version is "Kornet-EM". By default, the data for the complex with the 9M133FM-3 missile are given.



The Kornet-D/Kornet-EM ATGM combat vehicle on display at the MAKS-2011 air show, Ramenskoye, 16.08.2011 (<http://militaryrussia.ru/forum/>).

Author: [DIMMI](#)

Created: 11.08.2011 11:06:31

Comments: 19

[READ THE FULL ARTICLE →](#)Object 483**DATA AS OF 2010 (standard replenishment)****Object 483**

★★★★

Experimental flamethrower medium tank. Developed by Kharkov KBTM in 1959 on the basis of the hull and chassis of the T-54B. Chief designer F.A. Mostovoy. Manufactured by Kharkiv ZTM named after Malyshev. Work ceased in 1962.

## Catalog of military equip

AIR

EARTH

- Armored vehicles
- Surface-to-surface ballistic
- Surface-to-surface cruise r
- Air defense systems
- Anti-missile systems
- Land-based ATGMs
- Close combat weapons
- Small arms
- Artillery
- Radar, electronic warfare, e

WATER

SPACE

Personalities

News and updates



## Our partners:



1604.ru



## Visitors

	2,35M		50,864
	350,909		48,856
	139,849		39,477
	137,572		34,647
	123,545		32,275
	84,775		28,245
	71,414		27,495
	62,144		25,074

FLAG count

## Latest comments

Electronic warfare complex K

PPP Wrote:...After all, Donald Coo has enough RTR systems - he was guaranteed to "write"...

[Big Prison](#) 2017-11-01 18:47Electronic warfare complex K

Altimeter Wrote:...If the reason for absence of the first is known, then Voodoo was not bad...

[Bolshoy Prison](#) 2017-11-01 18:28Electronic warfare complex K

PPP Wrote:Max Wrote:data on no use of Khibiny ...There are general rules of counteraction...

[Altimeter](#) 2017-11-01 17:46Electronic warfare complex K

And a video-schmideo to boot <https://youtu.be/kOoQ3ru4QUE> pa fa

[oldstaryi](#) 2017-10-31 20:43



Flamethrower tank "object 483". Tank museum in Kubinka, 03.07.2011 (photo - VLAS, <http://militaryrussia.ru/forum> ).

Author: [DIMMI](#)

Created: 13.01.2010 18:07:20

Comments: [3](#)

[READ THE FULL ARTICLE](#) ➔

### [Object 640 / Black Eagle](#)

DATA AS OF 2010 (standard replenishment)

"object 640" / "Black Eagle"

★★★

An experimental promising main battle tank. The development of the promising tank project was conducted in the 1990s by the Omsk Plant of Transport Engineering (OZTM, Omsk) design bureau as a deep modernization of the T-80U main battle tank . The prototype model "object 640" was first presented to the public in 1997 at an exhibition of military equipment in Omsk. In 1999, the real prototype "object 640" and a model-mockup of the tank were demonstrated at the same exhibition. It was assumed that the tank would be accepted into service in the early 2000s, but this did not happen. Probably, in 2008-2009, work on the project was curtailed for non-technical reasons.



Experimental tank "object 640" "Black Eagle" (1999, <http://t80leningrad.narod.ru> ).

#### [Electronic warfare complex K](#)

In principle, so much has been written about Khibiny that, thanks to some, it is not entirely...

[oldstavi](#) 2017-10-31 20:37

#### [Electronic warfare complex K](#)

Photo of the piece of iron itself

[Sierra](#) 2016-09-18 16:10

#### [Electronic warfare complex K](#)

The material, of course, is not entirely appropriate, but it fits in with the discussion here...

[osankin](#) 2014-09-09 12:05

#### [Electronic warfare complex K](#)

PPP Wrote: Moreover - you can't explain why they are suppressing Aegis radars at such a low...

[Artist](#) 2014-09-09 00:12

#### [Electronic warfare complex K](#)

Max Wrote: Ok, thanks for the answer, frankly speaking, not a simple answer to those...

[Artist](#) 2014-09-08 23:43

#### [Electronic warfare complex K](#)

Max Wrote: data on the non-use of Khibiny ...There are general rules counteracting the means...

[PPP](#) 2014-09-05 18:28





Experimental tank "Object 640" "Black Eagle", probably 2010 ( <http://www.militaryphotos.net> ).

Author: [DIMMI](#)

Created: 01.03.2010 01:25:08

Comments: [15](#)

[READ THE FULL ARTICLE](#) »

## RPG-29 Vampire

**DATA AS OF 2011 (standard replenishment)**

**RPG-29 "Vampire" / TKB-0175 / 6G20**

**RPG-29N**

★★★

Hand-held anti-tank grenade launcher (RPG). Developed by GNPP Bazalt (GSKB-47), general designer - A.N. Obukhov, designer - V.S. Tokarev and TsKIB SOO, designers V.I. Matveyev, V.I. Zaytsev in 1983-1989 under the index TKB-0175 based on the RPG-16. The grenade launcher was developed for a new generation of tandem cumulative rounds (grenades) for RPGs (GNPP Bazalt). Fiberglass solid propellant rocket motors for one of the round types were put into mass production in 1986 (developer - NPO Altai, Biysk). The tandem-shot (grenade) grenade launcher PG-29V was accepted into service in 1989. The manufacturer, the Molot machine-building plant, produced a pilot batch of grenade launchers, which were exported. Serial production for the USSR and Russian Armed Forces was not conducted ( source: E.I. Dubrovin, Deputy General Director of the Bazalt State Research and Production Enterprise ). The grenade launcher was first

shown to the media at the IDEX-93 arms exhibition in Abu Dhabi in 1993.



RPG-29 grenade launcher and PG-29V rounds (section, combat-ready, in flight) and TBG-29V (collage based on photos from <http://militaryphotos.net> ).

Author: [DIMMI](#)

Created: 05.01.2011 07:13:07

Comments: [13](#)

[READ THE FULL ARTICLE ->](#)

## T-54

**DATA AS OF 2011 (standard replenishment)**

T-54 / "object 137"

OT-54 / "object 481"

T-54M / "object 139"

T-54A / "object 137G"

T-54B / "object 137G2"

T-54M / "object 137M"

★★★★

Medium tank. Created in the design bureau of plant No. 183 (later - PO "Uralvagonzavod"), chief designer - A.A. Morozov. The prototype "object 137" was created in 1945 (an improved version of which is sometimes called the "T-54 model 1946") based on the hull, transmission, chassis and other technical solutions used in the latest models of the T-44 medium tank (T-44B / T-44V - model designation KB / T-44B with modifications of October-December 1944). The T-54 tank was accepted into service by a decree of the Council of People's Commissars of the USSR in April 1946. Serial production of the first model T-54-1 under the name T-54 began at Plant No. 183 (UVZ), No. 75 (later - PO KhZTM, Kharkov) and No. 174 (later PO Omsktransmash, Omsk) in 1946. For more details, see the "Modifications" section below. An experimental series of 20 tanks was transferred to the Belorussian Military District for testing in May 1947. The most widespread series is the T-54-3 / "T-54 model 1951" - it was produced by the industry from 1951 to 1955, and was repeatedly modernized. In the T-54M / "object 137M" version (model of the 1977 configuration), the tank was removed from service with the Russian army in 1994. By default, the T-54 is understood to be the T-54-3 / "T-54 model 1951".



T-54-1 / "object 137" / "T-54 model 1946" in the military museum in Verkhnyaya Pyzhma, 2009 (photo by Nucl0id, <http://ru.wikipedia.org> ).

Author: [DIMMI](#)

Created: 10.01.2010 01:24:37

Comments: [28](#)

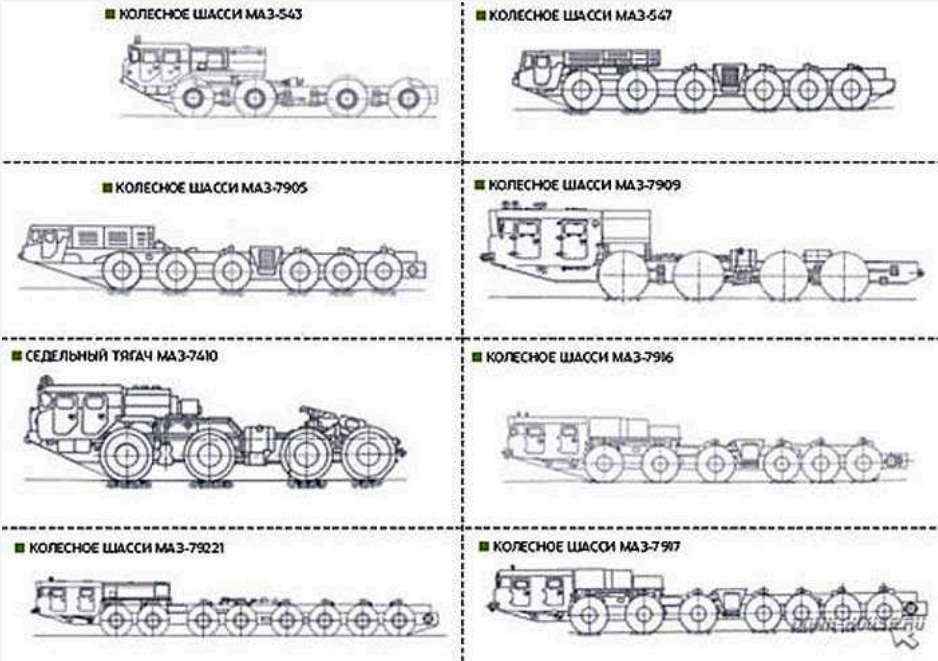
[READ THE FULL ARTICLE ->](#)

## Identification of SPU on MAZ chassis



Identification of SPU on MAZ chassis (in progress)

In this article we will try to summarize information on various SPU of long-range surface-to-surface missiles on multi-axle chassis developed by MAZ Design Bureau. The materials of the article will be used in the articles of the site on surface-to-surface missiles. The article has just begun to be filled...



( <http://down-house.ru> )

Author: [DIMMI](#)

Created: 23.05.2011 01:10:07

Comments: [58](#)

READ THE FULL ARTICLE →

RPG-2

DATA AS OF 2011 (standard replenishment)

RPG-2 / DRG-40

RPG-2N

★★★

Hand-held anti-tank grenade launcher (RPG). Development of the DRG-40 dynamo-reactive grenade launcher with the PG-80 grenade was started by GSKB-30 of the USSR Ministry of Agricultural Engineering under the supervision of A.V. Smolyakov in 1947. Lead designers were S.G. Korshunov and V.F. Kuzmin (both - USSR State Prize for the creation of the grenade launcher). After completion of field tests, the grenade launcher was called RPG-2, and the grenade - PG-2. In the RPG-2 grenade launcher, it was possible to achieve greater stability of the firing results at different air temperatures - both in winter and summer. The RPG-2 grenade launcher was adopted by the USSR Armed Forces in 1949. According to the staff, such a grenade launcher was to be in service with each motorized rifle squad of the Ground Forces.



Soldiers of the North Vietnamese army with an RPG-2 grenade launcher during the Vietnam War (Lovi A.A., Korenkov V.V. et al. Domestic anti-tank grenade launcher systems. // Weapons. 2001).

Author: [DIMMI](#)

Created: 19.05.2011 22:48:57

Comments: [1](#)

READ THE FULL ARTICLE →

T-95 / Object 195

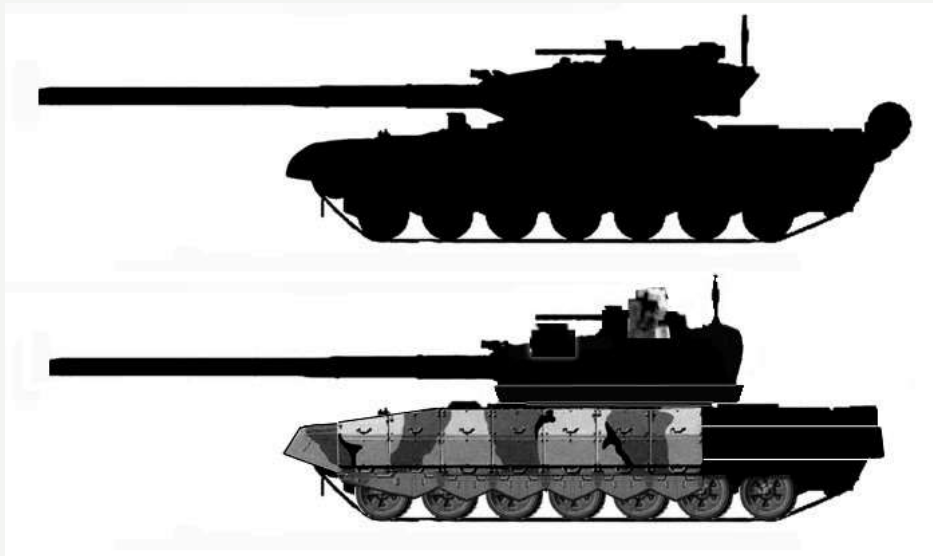
DATA AS OF 2011 (standard replenishment)

T-95 / "object 195"

★★★

An experimental promising main battle tank. Development of a promising tank project was started within the framework of the research and development competition "Improvement-88" (1988). The lead developer is the Ural Design Bureau of Transport Engineering (Nizhny Tagil), the tanks are manufactured by PO Uralvagonzavod (UVZ, Nizhny Tagil). Co-contractors of the research and development: FSUE NIID,

OJSC VNITM, OJSC VNITI, OJSC Ural NITI, FSUE Plant No. 9, FSUE PO Barrikady, FSUE TsNIM, OJSC VPMZ Molot, NPO Elektromashina, which includes SKB Rotor, etc. Assembly of the first prototype "Object 195" was carried out at UVZ in 1999-2000. The development of the Object 195 tank was first announced in the media in July 2001. In 2006, the media reported that the tank had passed state tests. In 2007, it was planned to complete the prototype tests in 2008 and to accept the tank into service in 2009. In 2008, tests of sample No. 2 of the experimental tank were conducted as part of the second stage of state tests - a total of two experimental samples were built. As of early 2010, it was reported that the tank was undergoing state tests that would be completed between 2010 and 2015. It was assumed that the tank would be accepted into service under the name T-95 in 2010. Serial production was believed to be launched at PO Uralvagonzavod. On April 9, 2010, Deputy Minister of Defense of Russia V. Popovkin announced that the program for creating "object 195" was closed and that the tank was not planned for service. In the fall of 2010, information appeared about the start of UKBTM of a new R&D project based on the tank "object 195". The data on the experimental tank are inaccurate and are based on publications in the open press, as well as on probabilistic assessments.



Alleged drawing of "object 195" (upper version - <http://otvaga2004.narod.ru> , 2010, lower - <http://militaryrussia.ru> , 2011)



One of the early prototypes of the tank "object 195", probably Nizhny Tagil, early 2000s ( <http://andrei-bl.livejournal.com> ).

Author: [DIMMI](#)

Created: 28.02.2010 10:44:54

Comments: [75](#)

[READ THE FULL ARTICLE ->](#)

## RPG-1

DATA AS OF 2011 (standard replenishment)

**RPG-1** / LPG-44

★★★

Hand-held anti-tank grenade launcher (RPG). Developed by the research range of small arms and mortar weapons of the Main Artillery Directorate of the Soviet Army, lead designer - G.P. Lominsky. Work on the creation of a light infantry grenade launcher (LPG) with an over-caliber cumulative grenade PG-70 began in 1944. Field tests of the grenade launcher were conducted in 1944-1945, after which the grenade launcher was named RPG-1, and the grenade PG-1. Preparation for serial production for military trials began. In the process of preparing the series, modifications were made to the RPG and the grenade. Work was stopped in 1948. The RPG-1 was not accepted into service.



RPG-1 with PG-1 grenade (Lovi A.A., Korenkov V.V. et al. Domestic anti-tank grenade launcher systems. // Weapons. 2001).

Author: [DIMMI](#)

Created: 19.05.2011 19:19:47

Comments: [1](#)

[READ THE FULL ARTICLE →](#)

## Radar is very simple (Pedestrian)

### **Radar is very simple**

Author - Pedestrian, 2011

Source - <http://www.avanturist.org>

The exact address of the article and discussion - <http://www.avanturist.org/forum/index.php/topic,1378.0.html>

Let's first figure out the range. There is a certain emitter of electromagnetic oscillations. If it is non-directional, then the wave propagates in the form of a sphere. Then the flux density of the radio wave at the range we are interested in will be equal to the power of the source divided by the area of the sphere with a radius equal to the given range. Or in other words, it is proportional to the power divided by the square of the range. If the antenna is not non-directional, but predominantly radiates in a certain direction of interest to us, then the flux density value must be multiplied by the antenna gain. At a certain range and a certain direction of predominant radiation, a target has appeared. Its reflectivity is determined by the concept of RCS, the effective scattering surface. The power reflected in the opposite direction will be equal to the flux density multiplied by the RCS. And the process will roll towards the emitter according to exactly the same law. The antenna gain is absolutely the same characteristic for both emission and reception. Then the antenna output power will be proportional to the product of the emission power, the target's RCS, the square of the antenna gain, and inversely proportional to the fourth power of the range. For confident detection of a signal against the background of its own noise, the minimum power at the receiver's input should be of the order of the receiver's own noise power. Transforming this equality relative to the range, we have - the target detection range of an active radar with a passive response is directly proportional to the fourth root of the product of the ratio of the average transmitter power to the receiver's sensitivity, the square of the antenna gain, and the target's RCS. The ratio of power to sensitivity is called the radar's energy potential. It can also be seen from this equation that the antenna's quality indicators greatly affect the radar's range.



Radar with phased array RSN-225 / FLAT TWIN (photo from the archive of the Military-Industrial Complex, Dementyev G. SMU-304 - GPTP "Granit" - JSC "GNPO "Granit". // Military-Industrial Courier. No. 7 / 2007).

Author: [DIMMI](#)

Created: 31.03.2011 10:43:55

Comments: [17](#)

[READ THE FULL ARTICLE →](#)

## 1L220 / 1L220U Zoo-2

### **DATA FOR 2011 (standard update)**

1L220 "Zoopark-2"

**1L220U / 1L220U-KS "Zoopark-2" (Ukraine)** Radar artillery reconnaissance complex. The development of the complex was entrusted to the Zaporizhzhya NPO Iskra by the Resolution of the USSR Council of Ministers dated 05.07.1981. The complex was created as a radar reconnaissance complex of increased range (in comparison with the "Zoopark-1" complex).

★★





Machine of the 1L220-U "Zoopark-2" complex, Ukraine ( <http://talks.guns.ru> ).

Author: [DIMMI](#)

Created: 29.03.2011 15:50:48

Comments: [3](#)

[READ THE FULL ARTICLE →](#)

### RPO-M / RPO PDM-A Shmel-M

DATA AS OF 2010 (standard replenishment)

**"Shmel-M" RPO-M / RPO PDM-A**



A jet infantry flamethrower with a disposable TPK with a shot and a reusable launcher. Developed by the Instrument-making Design Bureau (KBP, Tula) based on [the RPO-A](#) flamethrower. Adopted in 2004. The media also call it the RPO-2 "Prize".



Infantry rocket flamethrower RPO-M "Shmel-M" (assembled based on photo by Mike1979, <http://ru.wikipedia.org> )

Author: [DIMMI](#)

Created: 12.12.2010 02:59:20

Comments: [5](#)

[READ THE FULL ARTICLE →](#)

### Hermes Complex / Hermes-A / Klevok-A / Hermes-K

DATA FOR 2011 (standard update)

Complex "Hermes" / "Hermes-S"

Complex "Hermes-A" / "Klevok-A"

Complex "Hermes-K"

Prospective aviation ATGM (as amended in 1997)



Antitank missile system for multiple purposes/multipurpose guided weapons system. Analysis of press publications as of 1996 allowed us to conclude that the development of a "promising airborne ATGM" was already underway at the Instrument-Making Design Bureau (hereinafter referred to as KBP, Tula) under the direction of A.G. Shipunov. Tests of the airborne version of the Hermes-A ATGM as part of the Ka-52 helicopter armament were completed in the summer of 2003. The Hermes-A ATGM is ready for serial production. On August 23, 2009, the head of the KBP delegation at the MAKS-2009 air show, Yuri Savenkov, announced that the helicopter version of the system would undergo flight tests in 2010 and would be accepted into service. Serial production for the needs of the Russian Ministry of Defense



for arming Ka-52 and Mi-28N helicopters was planned to be launched in 2011-2012. It was also stated that in the future, the missiles of the Hermes complexes can be used with the Pantsir-S1 air defense missile system.



Launchers of the Hermes-A complex on the Ka-52 helicopter, MAKS-2007 (photo by Said Aminov, <http://pvo.guns.ru> ).

Author: [DIMMI](#)

Created: 18.01.2009 01:55:08

Comments: [5](#)

[READ THE FULL ARTICLE](#) →

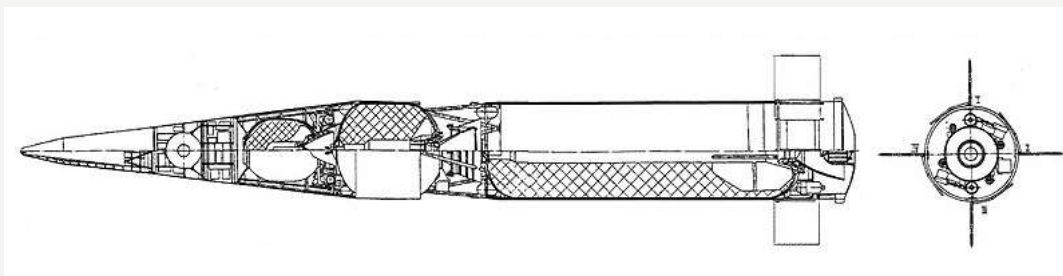
### Verenitsa complex, F-22 missile (project)

**DATA AS OF 2011 (standard replenishment)**

**Complex (R&D topic) "Verenitsa", F-22 missile**

★★★

Mobile small-sized intercontinental missile / mobile combat missile system (MCMS). The development was carried out in accordance with the decision of the Military-Industrial Complex of the USSR Council of Ministers No. 57 of April 5, 1976 and No. 123 of May 26, 1977 within the framework of the R&D topic "Gorizont-1". The lead developer is the Arsenal Design Bureau (Leningrad), the General Machine-Building Design Bureau, the Motor Design Bureau, the Iskra Production Association, and the Research Institute of Automation and Instrument-Making also took part in the development. The development specifications were developed by TsNIIMash (Ministry of General Machine-Building of the USSR) and 4 Research Institutes of the USSR Ministry of Defense. The purpose of the complex is to deliver a retaliatory strike after an enemy nuclear missile attack. The development of the project showed the possibility of creating such a complex within 7 years. The results of the developments on the topic of R&D "Verenitsa" were later used by the Design Bureau "Arsenal" in the development of a light small-sized solid-fuel ICBM F-27.



The F-22 ICBM project, developed under the research project "Verenitsa" (Valov Yu.F. Work of the Arsenal Design Bureau on the creation of a mobile combat missile system. // Bastion. No. 5 / 2006).

Author: [DIMMI](#)

Created: 23.01.2011 19:23:13

Comments: [2](#)

[READ THE FULL ARTICLE](#) →

### Baikal (project)

**DATA FOR 2011 (standard update)**

**Complex "Baikal"**

★

Front (operational-tactical extended range) missile system. Developed by NII-1 (now - Moscow Institute of Thermal Engineering) by the decision of the Military-Industrial Complex of the USSR Ministry of Defense dated June 7, 1966, chief designer - A.D. Nadiradze. The system was created as a replacement for the OTR "Temp-S" system in connection with the creation in the USA of a promising SAM with theater missile defense capabilities SAM-D (development was delayed). In developing the missile system, technical solutions adopted in the design of the initial version of the mobile ICBM "Temp-2S" were used. It was planned to equip the missile with a system of means to overcome missile defense. Development of the missile was stopped after the protection of the preliminary design, probably due to delays in the development of the SAM-D SAM.

Author: [DIMMI](#)

Created: 20.01.2011 17:27:50

Comments: [2](#)

[READ THE FULL ARTICLE](#) →

RPO Lynx

DATA FOR 2011 (standard replenishment)

**RPO "Lynx"**

Capsule-type infantry rocket flamethrower (the incendiary mixture is contained in a capsule shot). Developed by the Instrument-Making Design Bureau (KBP, Tula) by designers Kamolov and Yu. Kirilov in 1972-1974. Developed using units and parts of the RPG-16 grenade launcher. Adopted by order of the USSR Minister of Defense No. 006 dated 05.01.1975.



Shooting from the RPO "Rys" flamethrower from a kneeling position (Olgin V. What we fought in Chechnya with. // Soldier of Fortune. No. 08 / 1997).

Author: DIMMI

Created: 13.12.2010 18:53:03

Comments: 5[READ THE FULL ARTICLE](#) →MRO-A

DATA FOR 2010 (standard replenishment)

**MRO-A**

Compact single-use capsule-type rocket flamethrower (ammunition - capsule with flame mixture). Developed by GNPP Bazalt (Moscow) based on the RShG-2 rocket assault grenade. Intended for use by chemical defense troops, lighter and less powerful than [the RPO-A Shmel](#) flamethrowers. Adopted by chemical defense troops in 2004 (in 2003 according to other sources).



Using the MRO-A flamethrower from a kneeling and standing position ( <http://russianguns.ru> ).

Author: DIMMI

Created: 13.12.2010 20:03:02

Comments: 2[READ THE FULL ARTICLE](#) →S-375 system (project)

DATA AS OF 2010 (standard replenishment)

**System S-375**

Multichannel missile defense system for the Strategic Missile Forces' positional areas. Designed by the Almaz Central Design Bureau, chief designer B.V. Bunkin. The design, apparently, began in May 1970 (issuance of initial data for creating a preliminary design for the system). At the preliminary design stage, three versions of the system with two lower limits of destruction of enemy warheads were considered. It was assumed that the accuracy of anti-missile guidance, coupled with the power of the warhead, would ensure the exclusion of effective detonation of enemy nuclear warheads. The complex was planned to include a radar for detection, selection and guidance of Sosna anti-missiles and a high-speed anti-missile (3 launchers per 1 defended ICBM silo). During the discussion of the preliminary design in 1970, it was noted that there was no fuel for missiles with the required characteristics, the use of already developed missiles was futile, and there was a problem with warning missile defense systems of ICBM basing areas (there are no AWACS radars in many of the necessary areas, for example, in Siberia). It is possible that some of the developments in the preliminary design of the S-375 system were tested during the testing of the S-225 missile defense system. It is also possible that some of the ideas implemented in the S-225 were used in the S-375 system.



*The data are fragmentary and therefore hypothetical.*

Author: [DIMMI](#)

Created: 11.12.2010 15:55:28

Comments: [2](#)

READ THE FULL ARTICLE →

Zaslon Complex

**DATA AS OF 1997 (standard replenishment)**  
**"Zaslon" complex**



Project of the missile defense system NII-244 of the USSR Ministry of Radio Industry (Minister - V.D. Kalmykov). It was supposed to use the "Program-2" AWACS radar (NII-37, chief designer - V.I. Markov) for target designation. The possibility of recognizing real warheads among false targets using the radar was declared (not implemented). Research and development work was conducted in 1965.

Author: [DIMMI](#)

Created: 28.03.2010 16:41:01

Comments: [1](#)

READ THE FULL ARTICLE →

[1](#) [2](#) [3](#) ... [10](#) [11](#) [12](#) [13](#) [14](#) [15](#) [16](#)

© 2009-2015 [militaryrussia.ru](#)  
Copying and use of materials  
is permitted only with a link  
to the corresponding article on the site

590

Rambler's  
Top100

AviaTOP